Contents

NUMBER 1

REVIEW PAPERS

1 The cephalosporin antimicrobial agents: a comprehensive review: K. A. CAPRILE

33 Pharmacotherapeutic aspects of medication of birds: G. M. DORRESTEIN & A. S. J. P. A. M. VAN MIERT

SCIENTIFIC PAPERS

45 Investigation of pharmacokinetic parameters of tiamulin after intramuscular and subcutaneous administration in normal dogs: G. LABER

50 The oxidative metabolism of fenbendazole: a comparative study: C. R. SHORT, W. FLORY, L. C. HSIEH & S. A. BARKER

56 Effect of induced synovial inflammation on pharmacokinetics and synovial concentration of sodium ampicillin and kanamycin sulfate after systemic administration in ponies: E. C. FIRTH, W. R. KLEIN, J. F. M. NOUWS & TH. WENSING

63 Hypnoanalgesia with R 8110/fentanyl in the dog: pharmacodynamic and pharmacokinetic interactions: J. MONBALIU, A.-D. DEGRYSE, L. A. A. OOMS, P. VAN DIJK, E. LAGERWEIJ, M. MICHIELS, R. WOESTENBORGHS & J. HEYKANTS

71 Influence of inflammation on serum concentration, molecular heterogeneity and drug binding properties of canine alpha-1-acid glycoprotein: C. P. DELLO, F. M. BELPAIRE, A. DE RICK & N. H. FRAEYMAN

77 Dose-dependent plasma elimination of subcutaneously administered calcium heparin in horses: H. GERHARDS & M. KIETZMANN

84 Pharmacokinetics of ketamine HCl and metabolite I in the cat: a comparison of i.v., i.m., and rectal administration: R. M. HANNA, R. E. BORCHARD & S. L. SCHMIDT

94 The correlation of the thermal and mechanical antinociceptive activity of pethidine hydrochloride with plasma concentrations of the drug in sheep: A. NOLAN, A. E. WATERMAN & A. LIVINGSTON

103 Pharmacokinetics of ticarcillin and clavulanic acid given in combination to adult horses by intravenous and intramuscular routes: R. W. SWEENEY, J. BEECH, R. D. SIMMONS & L. R. SOMA

SHORT COMMUNICATIONS

109 The biphasic effect of clenbuterol hydrochloride on uterine activity of ovariectomized ewes: M. M. AL-EKNAH & D. E. NOAKES

112 Plasma protein binding of theophylline in dogs: I. J. MUNSIFF, G. D. KORITZ, B. C. McKIERNAN & C. A. NEFF-DAVIS

115 Plasma protein binding of ketamine and metabolite I in the cat: R. M. HANNA, R. E. BORCHARD & S. L. SCHMIDT

118 Book review

119 Notices

i Author index for Volumes 1–10

NUMBER 2

SCIENTIFIC PAPERS

121 Effect of diuretics on ketamine and sulfanilate elimination in cats: R. M. HANNA, R. E. BORCHARD & S. L. SCHMIDT

130 Concentrations of immunoreactive leukotriene B_4 in uterine lavage fluid from mares with experimentally induced and naturally occurring endometritis: E. D. WATSON, C. R. STOKES & F. J. BOURNE

135 Some pharmacokinetic data of aditoprim and trimethoprim in healthy and tick-borne fever infected dwarf goats: N. W. KNOPPERT, S. M. NIJMEIJER, C. T. M. VAN DUIN, C. KORSTANJE, H. VAN GOGH & A. S. J. P. A. M. VAN MIERT

145 The effect of testosterone and rutting on the metabolism and pharmacokinetics of sulphadimidine in goats: J. F. M. NOUWS, B. P. W. MEESEN, H. VAN GOGH, C. KORSTANJE, A. S. J. P. A. M. VAN MIERT, T. B. VREE & M. DEGEN

155 Pharmacokinetics of single doses of cefoxitin given by the intravenous and intramuscular routes to unweaned calves: S. SOBACK

163 Effects of paracetamol and acetylsalicylic acid on the post-operative course after experimental orthopaedic surgery in dogs: D. N. MBURU, S. W. MBUGUA, L. A. SKOGLUND & P. LÖKKEN

171 Dopamine-sensitive receptors that evoke rumination and modify reticulo-ruminal activity in sheep: K. J. STAFFORD & B. F. LEEK

177 Development of a novel *in vitro* equine anthelminthic assay: S. D. FOLZ, R. A. PAX, T. R. KLEI, E. M. THOMAS, K. A. ASH, G. A. CONDER & J. L. BENNETT

183 Pharmacokinetics of a long-acting chloramphenicol formulation administered by intramuscular and subcutaneous routes in cattle: P. SANDERS, P. GUILLOT, & D. MOUROT

191 The effect of various antibacterial preparations on the *in vitro* morphology and chemotactic response of equine neutrophils: J. F. PYCOCK, W. E. ALLEN, D. J. PORTER & E. H. BOYD

197 Zearanol metabolism by subcellular fractions from lamb liver: G. POMPA, C. MONTESISSA, F. M. DI LAURO, L. FADINI & C. CAPUA

SHORT COMMUNICATIONS

204 The elimination of fenbendazole and its metabolites in the chicken, turkey and duck: C. R. SHORT, S. A. BARKER, L. C. HSIEH, S.-P. OU, W. M. PEDERSOLI, L. M. KRISTA & J. S. SPANO

210 Multiple intravenous dose pharmacokinetics and residue depletion profile of gentamicin in pigs: J.-L. RIOND & J. E. RIVIERE

215 Method of objective assessment of analgesia in the dog: R. L. HAMLIN, L. S. BEDNARSKI, C. J. SCHULER, P. L. WELDY & R. B. COHEN

221 Effect of AHR-5233 on flea antigen extract-induced skin reactions in flea-allergic dogs: J. M. YANNI, R. E. W. HALLIWELL & C. H. TRACY

226 Book reviews

227 Letter to the Editors

230 Notices

NUMBER 3

REVIEW PAPERS

233 The pharmacology of isometamidium: L. D. B. KINABO & 'THE LATE' J. A. BOGAN

246 Diuretics and cardiovascular disease: A. R. MICHELL

SCIENTIFIC PAPERS

254 Pharmacokinetics and efficacy of triclabendazole in goats with induced fascioliasis: L. D. B. KINABO & 'THE LATE' J. A. BOGAN

260 The pharmacodynamics of ivermectin in sheep and cattle: 'THE LATE' J. A. BOGAN & Q. A. McKELLAR

269 Salmonella colonization in young chickens given feed supplemented with the growth promoting antibiotic avilamycin: M. HINTON

276 Inhibition of rumination in sheep by α-adrenoreceptor antagonists: T. NICHOLSON, T. E. A. OSMAN & M. BELKHIRI

SHORT COMMUNICATIONS

283 Pharmacokinetics of oxyphenbutazone in horses: D. F. GERKEN & R. A. SAMS

288 Kinetic and insecticidal properties of ivermectin residues in the milk of dairy cows: P. L. TOUTAIN, M. CAMPAN, P. GALTIER & M. ALVINERIE

NUMBER 4

293 Editorial — Professor James A. Bogan — an appreciation

REVIEW PAPER

295 Xylazine — a review of its pharmacology and use in veterinary medicine: S. A. GREENE & J. C. THURMON

SCIENTIFIC PAPERS

314 Actions of the novel gastrointestinal prokinetic agent cisapride on equine bowel motility: J. N. KING & E. L. GERRING

322 Prokinetic effects of cisapride, naloxone and parasympathetic stimulation at the equine ileo–caeco–colonic junction: Y. RUCKEBUSCH & T. ROGER

330 Comparison of serum and renal gentamicin concentrations with fractional urinary excretion tests as indicators of nephrotoxicity: S. ANTHONY BROWN & F. B. GARRY

338 Parainfluenza-3-virus-induced enhancement of histamine release from calf lung mast cells — effect of levamisole: P. O. OGUNBIYI, W. D. BLACK & P. EYRE

345 Comparative effects of etomidate and its fluoro analogue, R8110 on testicular, adrenal and ovarian steroid biosynthesis: R. DE COSTER, W. WOUTERS, D. BEERENS, C. HAELTERMAN, R. DOOLAEGE, N. GOEMINNE & M. KREKELS

354 Biphasic disruption of fasting equine gut motility by dopamine — a preliminary study: J. N. KING & E. L. GERRING

362 Gizzard ulceration in chicks fed cysteamine alone or in combination with a histamine H_2-receptor antagonist: M. T. ZAVY, T. O. LINDSEY & R. D. HEDDE

374 Investigations of the effects of histamine inhalation on the tracheobronchial tree of calves by the forced oscillation technique: P. GUSTIN, A. R. DHEM, P. LEKEUX, F. LOMBA, F. J. LÁNDSÉR & K. P. VAN DE WOESTIJNE

381 Determination of the acute oral toxicity of theophylline in conscious dogs: I. J. MUNSIFF, B. C. McKIERNAN, C. A. NEFF-DAVIS & G. D. KORITZ

390 Pharmacokinetic estimation for therapeutic dosage regimens (PETDR) — a software program designed to determine intravenous drug dosage regimens for veterinary applications: J. E. RIVIERE, D. L. FRAZIER & W. L. TIPPITT

SHORT COMMUNICATIONS

397 Preliminary pharmacokinetics of ketoconazole in gopher tortoises (*Gopherus polyphemus*): C. D. PAGE, M. MAUTINO, J. R. MEYER & W. MECHLINSKI

402 Effects of halothane on the mechanical responses *in vitro* of coronary arterial rings of malignant hyperthermia susceptible swine: L. DEROTH & S. NADEAU

405 The oxfendazole pulse release bolus: D. ap T. ROWLANDS, M. T. SHEPHERD & K. R. COLLINS

409 Single injection inulin/PAH method for the determination of renal clearances in adult horses and ponies: B. D. BREWER, S. F. CLEMENT, W. S. LOTZ & R. GRONWALL

413 Pharmacokinetics of rifampin in calves and adult sheep: R. W. SWEENEY, T. J. DIVERS, C. BENSON & C. COLLATOS

417 Clinical pharmacokinetics of metronidazole in horses: J. D. BAGGOT, W. D. WILSON & S. HIETALA

421 Author index for Volume 11